



LOW SERVICE HYDRANT FLUSHING PLAN

(last updated August 24, 2011)

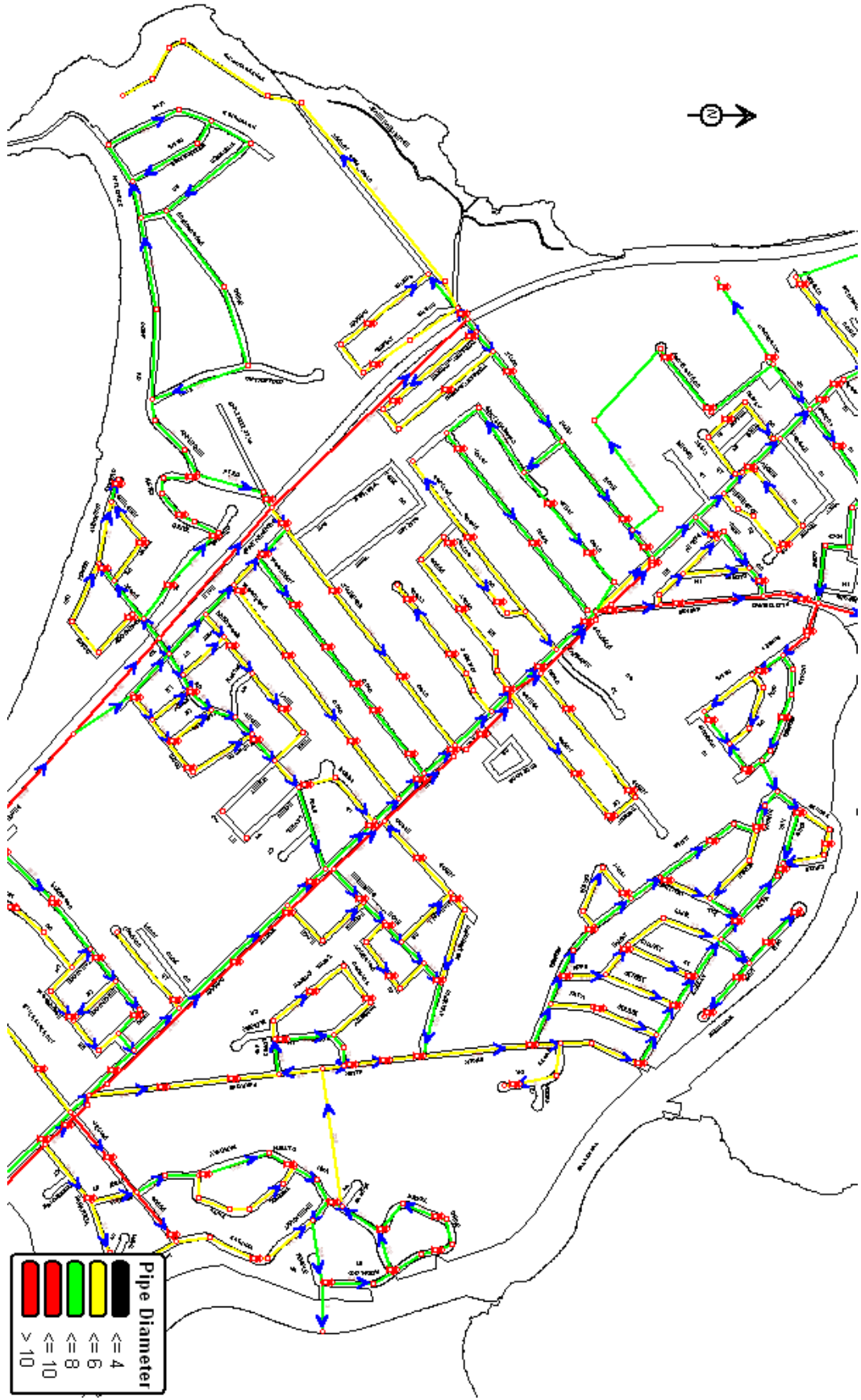
The intent of this plan is to aid the water distribution crews in maximizing the removal of sediment and rust when performing citywide hydrant flushing while minimizing rusty water complaints. While studies prove that uni-directional flushing of water mains is best in removal of sediment, this concept is not possible in Burlington due to the large number of inoperable valves. Our plan involves starting at the water source (water plant) and flushing hydrants outward, beginning with the major feed mains (10" diameter and larger) and then finishing with the smaller pipes after the major lines have been cleaned. Remember to use the hydrant's 6" steamer nozzle in order to get the highest flushing velocities. Here are a few comments on this plan:

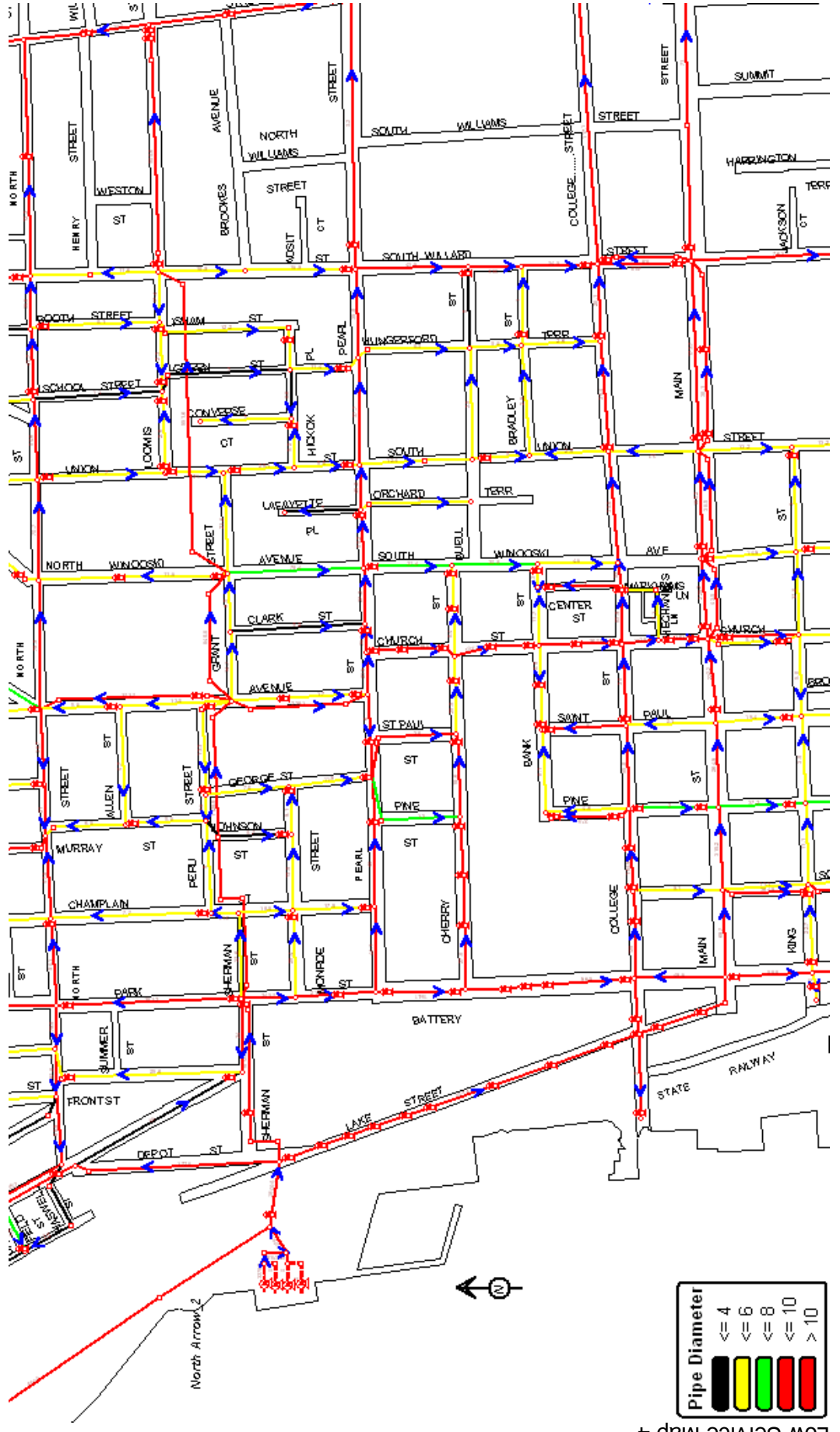
The attached maps show:

- Pipe sizes by color with 10" and larger mains just shown in red. The larger pipes are primary feeds to smaller pipes. The recommendation is to clean the primary feeds first, starting from the elevated tanks, and then going back to flush the secondary pipes.
- The arrows show direction of flow when the water plant is pumping and no hydrants are flowing. While direction of flow will change when hydrants are opened since multiple mains will feed the hydrant, after a hydrant is closed the rusty water will follow the flow path shown by these arrows. It is important to flush outward along a primary water main to get all of the sediment out and minimize rusty water complaints.
- These low service maps are laid out from north to south then east and are not following any recommended flow path. The flushing scenario described below involves starting on streets with primary mains, then working on streets with smaller mains.
 - Flush hydrants from water plant on Lake Street and up to College and then down Battery Street to Maple. (Map 4)
 - Flush Sherman and turn down Battery to College Street, then flush College all the way up to South Prospect. (Maps 4 & 9)
 - Flush Main Street all the way to reservoir. (Maps 4 & 9)
 - Flush Pearl and Colchester Ave all the way to the Winooski Bridge. (Maps 4 & 8)
 - Flush Cherry to South Winooski Avenue. (Map 4)
 - From Sherman flush Battery and Park all the way to Manhattan Drive, then backtrack on Park and flush North Street in both directions. (Maps 4 & 3)
 - Backtrack on North to Willard and flush Willard to Riverside and follow Riverside all the way to the Winooski Bridge. (Maps 3 & 8)
 - Backtrack on North to Rose Street and flush Rose then Manhattan Drive to Oak Street. (Maps 4, 3 & 8)
 - Backtrack on North to South Willard and then flush South Willard and Shelburne Road to Home Avenue. (Maps 4, 5, 6 & 7)
 - Go back to Main Street, flush South Champlain and Pine Street all the way to Home Ave, then head down Home to Industrial Avenue to Queen City Park. (Maps 4, 5, 6 & 7)
 - Backtrack on Pine and had both west and east on Flynn Avenue. (Map 6)
 - From Pine flush Lakeside and Central Avenues. (Map 6)
 - Flush the 16" North Transmission main wherever possible to Starr Farm Road. (Maps 4, 3 & 2)
 - Flush North Avenue from Battery Street and along Plattsburg Avenue. (Maps 4, 3, 2 and 1)
 - Flush streets with 8" mains, then 6" mains and finally 4" mains. (all maps)

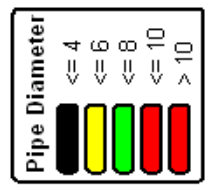
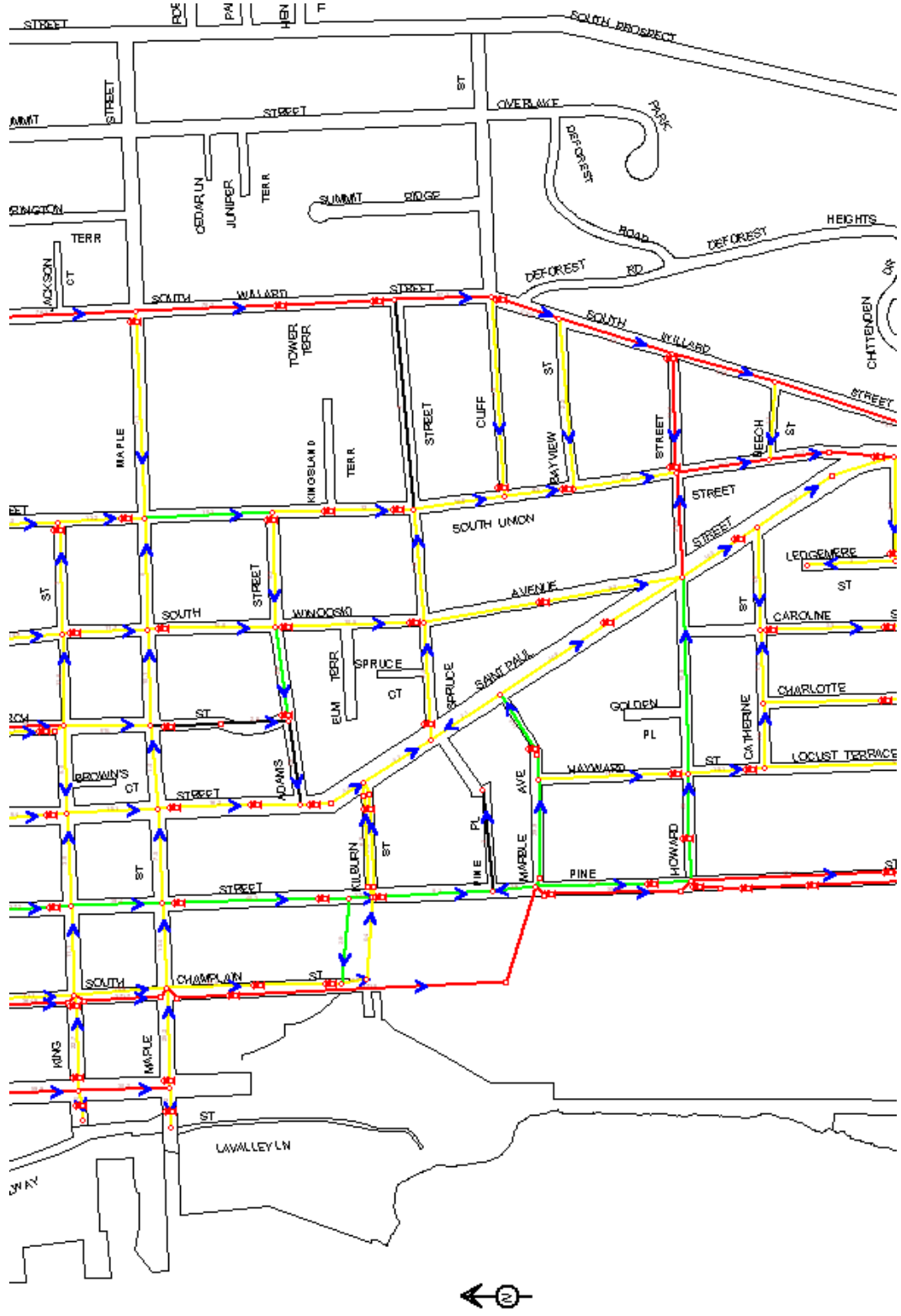
Just as with the high service flushing plan, this document is intended to change as we gain experience and adapt to problems encountered.

Low Service Map 2

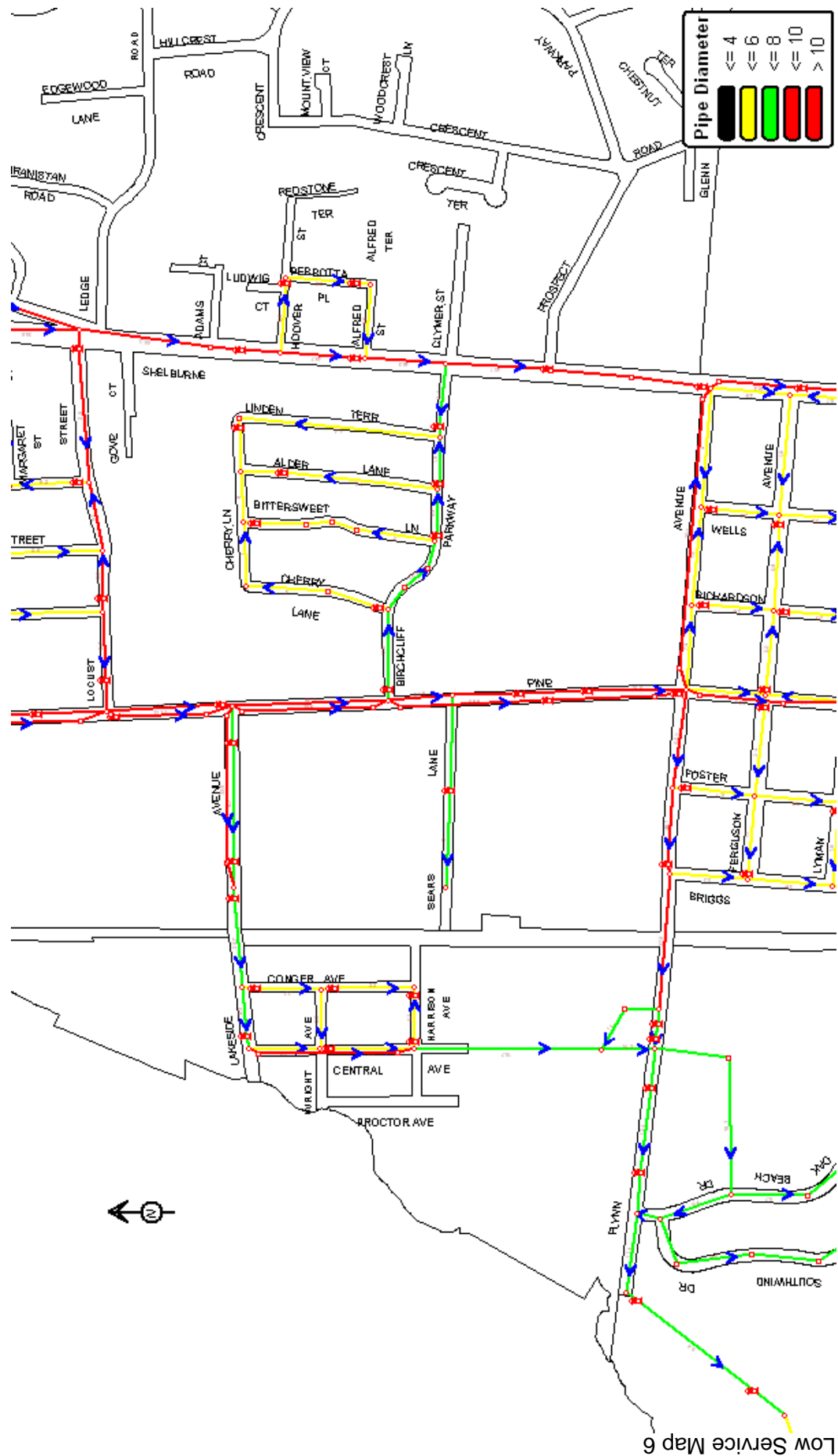


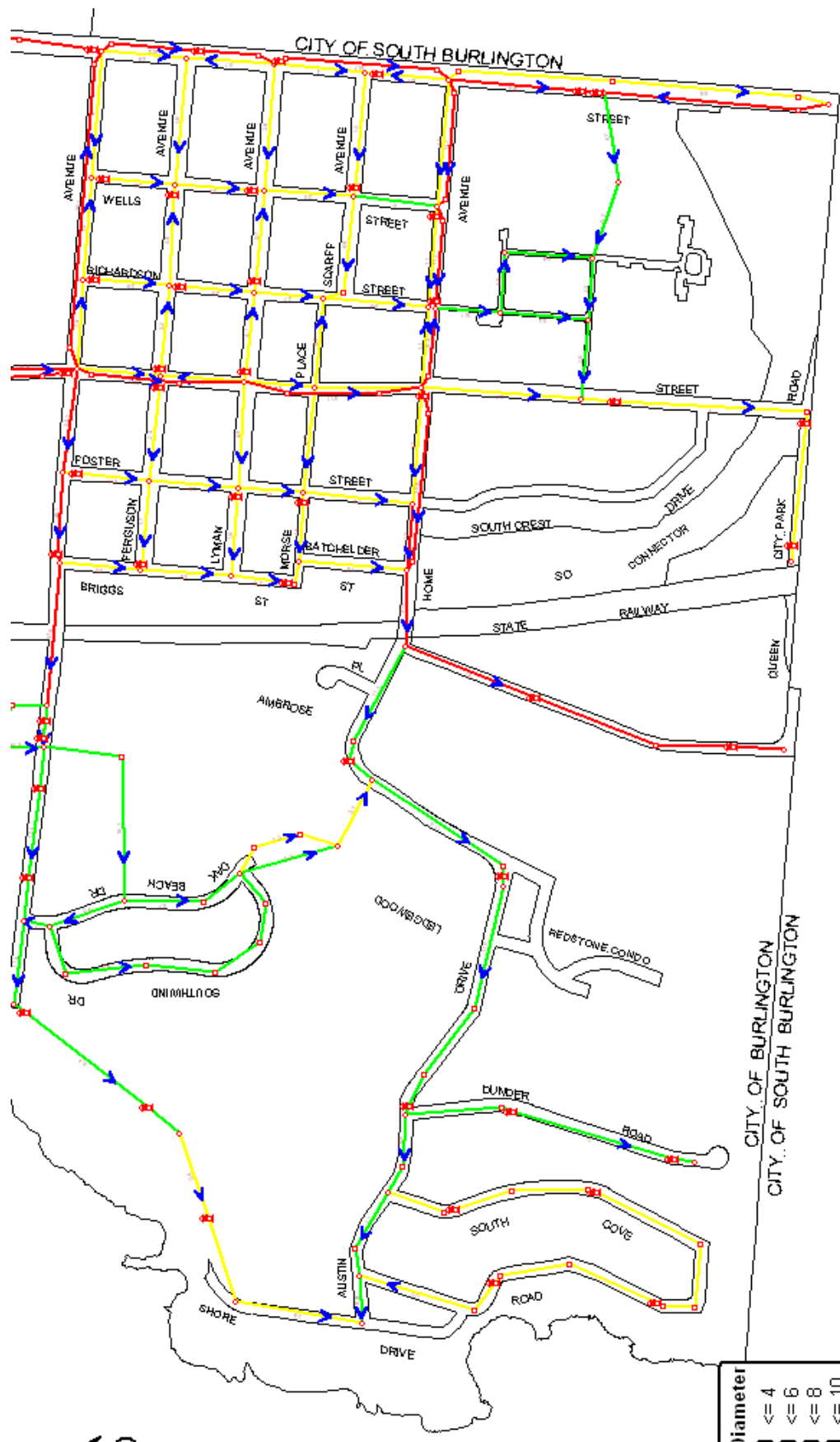


Low Service Map 4



Low Service Map 5





Low Service Map 7

